

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 06/23/2006

| PPLICATION NO. | F | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-------------------------|--------|------------|----------------------|---------------------|-----------------|
| 09/788,514 | 1 | 02/21/2001 | Yukihiro Abiko | 826.1680/JDH | 7937 |
| 21171 | 7590 | 06/23/2006 | | EXAMINER | |
| STAAS & F | IALSEY | LLP | AZAD, ABUL K | | |
| SUITE 700 1201 NEW Y | ORK AV | ENUE, N.W. | ART UNIT | PAPER NUMBER | |
| WASHINGT | ON, DC | 20005 | 2626 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|---|---|---|---|--|--|--|
| | | 09/788,514 | ABIKO ET AL. | | | |
| | Office Action Summary | Examiner | Art Unit | | | |
| | | ABUL K. AZAD | 2626 | | | |
| Period for | - The MAILING DATE of this communication app r Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHO WHIC - Extens after S - If NO - Failure Any re | DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 DIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, exply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | l. ely filed the mailing date of this communication. O (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 2a)⊠ 3)□ | Responsive to communication(s) filed on $\underline{20 \text{ Ag}}$. This action is FINAL . 2b) This Since this application is in condition for allowan closed in accordance with the practice under E | action is non-final. nce except for formal matters, pro | | | | |
| Disposition | on of Claims | | | | | |
| 5) | Claim(s) 1-22 is/are pending in the application. Italy Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-22 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examine of the drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the corrections. | vn from consideration. relection requirement. r. epted or b)□ objected to by the Edrawing(s) be held in abeyance. See | 37 CFR 1.85(a). | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority u | nder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | of References Cited (PTO-892) | 4) Interview Summary | | | | |
| 3) 🔲 Inform | of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other: | te atent Application (PTO-152) | | | |

DETAILED ACTION

Response to Amendment

- 1. This action is in response to the communication filed on April 4, 2006.
- 2. Claims 1-22 are pending in this action.
- 3. The applicant's arguments with respect to claims 1-22 have been fully considered but they are not deemed to be persuasive. For examiner's response to the applicant's arguments or comments, see the detailed discussion in the Response to the Arguments section.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1-6, 9-13 and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Taniguchi et al. (US 6,484,137).

As per claim 1, Taniguchi teaches, "a data reproduction device for reproducing compressed multimedia data, including audio data", comprising:

"an extraction unit extracting a frame, which is unit data of the audio data" (Fig. 14, element 101 "frame unpacking means");

Art Unit: 2626

"a speed conversion unit speed converting the extracted frame by thinning out the extracted frame or repeatedly outputting the frame prior to decoding of the audio data or with the audio data compressed" (Fig. 14, element 12-1-2 and Fig. 26, element "decoded said information"); and

"a decoding unit decoding the speed converted frame" (Fig. 26, element "decoded said information" and "audio output"); and

"a reproduction unit reproducing audible sound represented by the audio data from the decoded frame" (Fig. 14, element 104).

As per claim 2, Taniguchi teaches, "a data reproduction device for reproducing compressed multimedia data, including audio data and also converting reproduction speed without decoding compressed audio data", comprising:

"an extraction unit extracting a frame, which is unit data of the audio data" (Fig. 14, element 101 "frame unpacking means");

"a setting unit setting a reproduction speed of the audio data" (Fig. 1, element 2, playback speed detector);

"a speed conversion unit speed converting the extracted frame by thinning out the extracted frame or repeatedly outputting the extracted frame prior to decoding of the audio data or with the audio data compressed" (Fig. 14, element 12-1-2 and Fig. 26, element "decoded said information"); and

"a decoding unit decoding the speed converted frame" (Fig. 26, element "decoded said information" and "audio output"); and

Art Unit: 2626

"a reproduction unit reproducing audible sound represented by the audio data from the decoded frame" (Fig. 14, element 104).

As per claim 3, Taniguchi teaches, "wherein the audio data are MPEG audio data" (Fig. 14, element "MPEG Audio Bitstream").

As per claim 4, Taniguchi teaches, "a scale factor extraction unit extracting a scale factor included in the frame" (col. 25, lines 18-67);

"a calculation unit calculating an evaluation function from the extracted scale factor" (col. 25, lines 56-67); and

"a control unit comparing a calculation result of the calculation unit with a prescribed threshold value and controlling not to transmit a corresponding frame to said speed conversion unit for speed converting if the calculation result is smaller than the threshold value" (col. 26, lines 1-21).

As per claim 5, Taniguchi teaches, "wherein said calculation unit calculates an evaluation function based on a plurality of scale factors included in the frame" (col. 25, lines 56-67).

As per claim 6, Taniguchi teaches, "a scale factor conversion unit generating a scale factor conversion coefficient for compensating for a discontinuous fluctuation of an acoustic pressure caused in a joint between frames, calculating the scale factor and scale factor conversion coefficient and inputting them as data to be decoded to said decoding unit if a plurality of scale factors included in the frame are reproduced by said reproduction unit" (col. 26, lines 22-45).

Art Unit: 2626

As per claims 9-13 and 16-20, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1-6.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 7-8, 14-15 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al. (US 6,484,137) as applied to claims 2, 9 and 16 above, and further in view of Okada et al. (US 5,809,454).

As per claim 7 and 8, Taniguchi does not explicitly teach, "which receives multimedia data, including both video data and audio data", further comprising:

"a separation unit breaking down the multimedia data into both video data and audio data";

"a decoding unit decoding the video data"; and

"a video reproduction unit reproducing the video data";

"wherein each piece of the video data and audio data is structured as MPEG data".

However, Okada teaches, "which receives multimedia data, including both video data and audio data" (col. 5, lines 48-64), further comprising:

Art Unit: 2626

"a separation unit breaking down the multimedia data into both video data and audio data" (Fig. 1, element 13, DMUX);

"a decoding unit decoding the video data" (Fig. 1, element 12, MPEG video decoder); and

"a video reproduction unit reproducing the video data" (Fig. 1, element 22, display).

Okada also teaches, "wherein each piece of the video data and audio data is structured as MPEG data" (col. 5, lines 48-63).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to receive multimedia MPEG data including both video data and audio data and reproduced video data as teach by Okada in the invention of Taniguchi's MPEG audio reproduction device/method because Okada teaches his invention capable of reducing the time lag between the generation of voices and the movement of moving pictures, and video decoder to produce a naturalistic output (col. 3, lines 59-67).

Claims 14-15 and 21-22, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 7-8.

Response to Arguments

8. Applicant argues that Taniguchi cited by the examiner relates to a process, which is performed after decoding of an audio signal not prior to decoding of the audio data.

Page 6

Art Unit: 2626

The examiner disagrees with the arguments presented by the applicant because frame unpaking means is not a audio data decoding means as interpreted by applicant; here frame unpaking means equivalent to applicant's frame extracting means.

Taniguchi teaches at Fig. 14, speed information is given to the control means to the unpacked frame before decoding the audio data at element 103. Therefore, Taniguchi teaches, a speed conversion unit thinning out a frame or repeatedly outputting the frame prior to decoding of the audio data or with the audio data compressed.

Page 7

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2626

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(571) 272-7599.** If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(571) 272-7602.**

Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to: (571) 273-8300.

Hand-delivered responses should be brought to **401 Dulany Street**, **Alexandria**, **VA-22314** (Customer Service Window).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 14, 2006

Primary Examiner
Art Unit 2626

Page 8